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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|--------------------------------------|----------------------|---------------------|------------------|
| 10/672,953 | 09/26/2003 | Bin Zhang | 200208037-1 | 9403 |
| 22879 7590 12/14/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD | | | EXAMINER | |
| | | | ONYEZIA, CHUKS N | |
| 11.12222010 | AL PROPERTY ADM NS, CO 80527-2400 | INISTRATION | ART UNIT | PAPER NUMBER |
| 10111 0022 | , | | 3691 | |
| | | | | |
| | | | NOTIFICATION DATE | DELIVERY MODE |
| | | | 12/14/2007 | ELECTRONIC |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

JERRY.SHORMA@HP.COM mkraft@hp.com ipa.mail@hp.com

| | Application No. | Applicant(s) | | | | |
|---|---|---|--|--|--|--|
| | 10/672,953 | ZHANG ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| <i>C,,,,</i> co , , ca ca , <i>ca ,,,,,</i> , , , , , , , , , , , , , , , , | | | | | | |
| The MAII ING DATE of this communica | Chuks Onyezia Esq. | 3691 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR WHICHEVER IS LONGER, FROM THE MAIL - Extensions of time may be available under the provisions of 3' after SIX (6) MONTHS from the mailting date of this communic - If NO period for reply is specified above, the maximum statuto - Failure to reply within the set or extended period for reply will, Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b). | ING DATE OF THIS COMMUNIC 7 CFR 1.136(a). In no event, however, may a reation. In period will apply and will expire SIX (6) MON by statute, cause the application to become AB | CATION. reply be timely filed ITHS from the mailing date of this communication. RANDONED (35 U.S.C. § 133). | | | | |
| Status | | • | | | | |
| 1) Responsive to communication(s) filed of | on <u>09/18/2007</u> . | | | | | |
| ,- | | | | | | |
| | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is | | | | | |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. | | | | | | |
| Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-17</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) is/are withdrawn from consideration. | | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| , | 6)⊠ Claim(s) <u>1,2,4-8,10-15 and 17</u> is/are rejected. | | | | | |
| • | 7) Claim(s) 3.9 and 16 is/are objected to. | | | | | |
| 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9) The specification is objected to by the Examiner. | | | | | | |
| 10)⊠ The drawing(s) filed on <u>26 September 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner. | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). | | | | | | |
| 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No. | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage | | | | | | |
| application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| - See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| Attachment(s) | | | | | | |
| Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO | • — | Summary (PTO-413) (s)/Mail Date | | | | |
| Notice of Draftsperson's Patent Drawing Review (PTO Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date | | Informal Patent Application | | | | |

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DETAILED ACTION

Response to Amendment

1. Applicants' amendment and arguments filed on September 18, 2007 have been fully considered, and discussed below. It is noted that applicant has amended claims 1, 9, and 16. Therefore, claim 1-17 are pending and currently considered for examination.

Allowable Subject Matter

2. Claims 3, 9, and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1, 2, 4-8, 10-15, and 17 are rejected under 35
 U.S.C. 102(b) as being anticipated by Messmer et al. U.S. Patent
 Number 7,096,197 B2 (PTO-892 Reference A).
- 4. As per claim 1, Messmer teaches a method, comprising:

 obtaining historical auction data (Col. 10 Lns. 1-5);

 determining, from the historical auction data, a first

 parameter that is a function of a joint bid distribution and a

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density function related to the joint bid distribution (Col. 4 Ln. 61 - Col. 5 Ln. 24) examiner interprets the sampling and clustering as a function that utilizes density determination and joint bid distribution;

selecting a bidder; obtaining a value distribution for the selected bidder (Col. 9 Lns 39-50); and

solving an equation that includes the first parameter and the selected bidder's value distribution, and not the value distribution of other bidders, to compute a bid value associated with the selected bidder for a given bid (Col. 9 Lns. 48-61)

- 5. As per claim 2, Messmer teaches the above limitations of claim 1. Messmer further teaches solving the equation comprises solving an ordinary differential equation that comprises a probability value distribution associated with the selected bidder and the derivative of the probability value distribution (Col. 9 Lns. 48-61).
- 6. As per claim 4, Messmer teaches the above limitations of claim 1. Messmer further teaches determining a first parameter comprises computing a ratio of the density function to the joint bid distribution (Col. 4 Ln. 61 Col. 5 Ln. 24) examiner interprets sampling and clustering as density determinations.
- 7. As per claim 5, Messmer teaches the above limitations of claim 1. Messmer further teaches repeating the acts of selecting

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a bidder, obtaining a probability value distribution for the selected bidder and solving the equation for additional bidders (Col. 10 Lns. 6-10).

8. Claim sets 6-8,10,11, 12-13, and 14,15,17 are rejected using logic similar to that used to reject claim set 1,2,4,5 (Col. 24 Lns. 16-40) examiner interprets that system limitations of above claims are detailed with the description of computer and internet network.

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Response to Arguments

9. Applicant's arguments filed 09/18/2007 have been fully considered but they are not persuasive.

Applicant argues that:

The equation includes a joint bid distribution, a density function, and the selected bidder's value distribution, and Messmer does not teach these three different elements in an equation for computing a bid value associated with a selected bidder.

Examiner responds that:

In (Col. 4 Ln. 61 - Col. 5 Ln. 24) examiner interprets the sampling and clustering as a function that utilizes density determination and joint bid distribution, and as for the bidder's value distribution factor, Messmer also incorporates this in to the function by distributing these values in to the sampling technique (see Col. 9 Lns. 39-46).

Applicant also argues that:

Messmer fails to teach solving ordinary differential equations, and fails to teach the specifically recited equation of claim 3, 9, and 16.

Examiner responds that:

Messmer makes use of iterative sampling technique that would rely on solving differential equations to reach an outcome

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(see Col 9 Lns. 43-46). As for applicant's arguments with respect to claims 3, 9, and 16, consideration was given and applicant's arguments are persuasive. The 102 rejections of claims 3, 9, and 16 have been withdrawn.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Guler et al.

U.S. Patent Publication No. 2002/0174052 Al (PTO-892 Reference

B) teaches a computer-implemented automated decision support system for designing an auction bid.

This Office action has an attached requirement for information under 37 CFR 1.105. A complete reply to this Office action must include a complete reply to the attached requirement for information. The time period for reply to the attached requirement coincides with the time period for reply to this Office action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chuks Onyezia Esq. whose telephone number is 571-270-1372. The examiner can normally be reached on Monday - Thursday 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Kramer can be reached on 571-272-6771. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

* * *

C. Onyezia 12/07/2007

ALEXANDER KALINOWSKI SUPERVISORY PATENT EXAMINER

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